

ABSTRACT

The present invention provides for methods of treating and preventing cardiac hypertrophy and heart failure. MEF-2 and Class II HDACs have been shown to have a major role in cardiac hypertrophy and heart disease, and inhibition of class II HDAC's
5 has been shown to have a beneficial, anti-hypertrophic effect. The present invention provides the link between MEF-2 and class II HDAC's, a kinase known as PKD. The present invention further demonstrates that inhibitors of PKD inhibit cardiac hypertrophy and heart disease by inhibiting, in part, the fetal cardiac gene expression and cellular reorganization that occurs when MEF-2 dependent transcription is inhibited.